

# Challenges Benefits and Essential Factors to Implementing a Recess Before Lunch Schedule in Montana Elementary Schools

Katie Bark, RD, LN  
Team Nutrition  
Montana State University



# Montana Team Nutrition

**Mary Stein**

(406)994-5640

[mstein@montana.edu](mailto:mstein@montana.edu)

**Mary Ann Harris**

(406) 994-5397

[Maryann.harris@montana.edu](mailto:Maryann.harris@montana.edu)



**Molly Stenberg**

(406) 994-7217

[stenberg@montana.edu](mailto:stenberg@montana.edu)

**Katie Bark**

(406)994-5641

[kbark@mt.gov](mailto:kbark@mt.gov)

**202 Romney Gym**

<http://www.opi.mt.gov/schoolfood/index.html>

# What is Recess Before Lunch?

Kids Play,  
And Then Eat!





# Our Research... two stages

- 2002-03 pilot project with four school sites
- 2008 on-line principal survey



# Project Design of Pilot Project

## Purpose:

- To determine change in food waste
- To determine acceptance and effectiveness as perceived from school staff and students

## Design:

- 4 elementary schools in Montana (2- grades K-2; 1 grades K-8; 1-grades 5-8)
- Spring 2002 through Spring 2003
- Three phases- in each phase conducted plate waste study, student focus group, staff surveys

# Project Design...Plate Waste

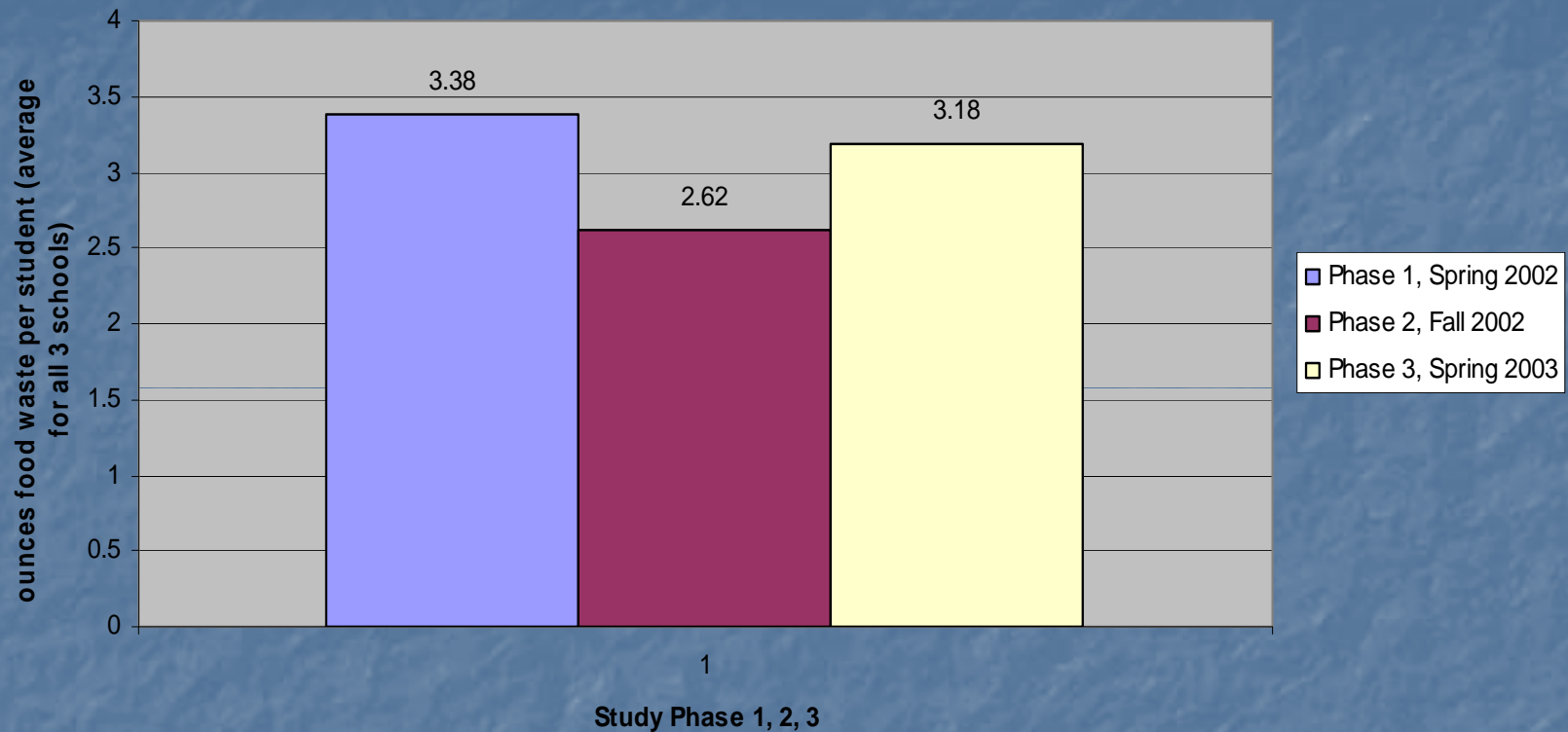
- Data is based on three of the four schools.
- The menu and portion size was consistent within each school throughout the 3 phases
- Food waste collected included food from school nutrition program meals, foods brought from home or other school venues
- The total amount of food and beverage waste was measured in pounds and ounces.
- Average student waste was calculated by total waste by total daily attendance.
- Plate waste days were unannounced to students and staff.



# 3 Phases of Data Collection

- Phase 1: conducted Spring 2002, PRIOR to the school implementing RBL
- Phase 2: conducted Fall 2002, after the initial implementation of RBL
- Phase 3: conducted Spring 2003, after the RBL policy had been in use for one year.

# Average Food Waste Per Student

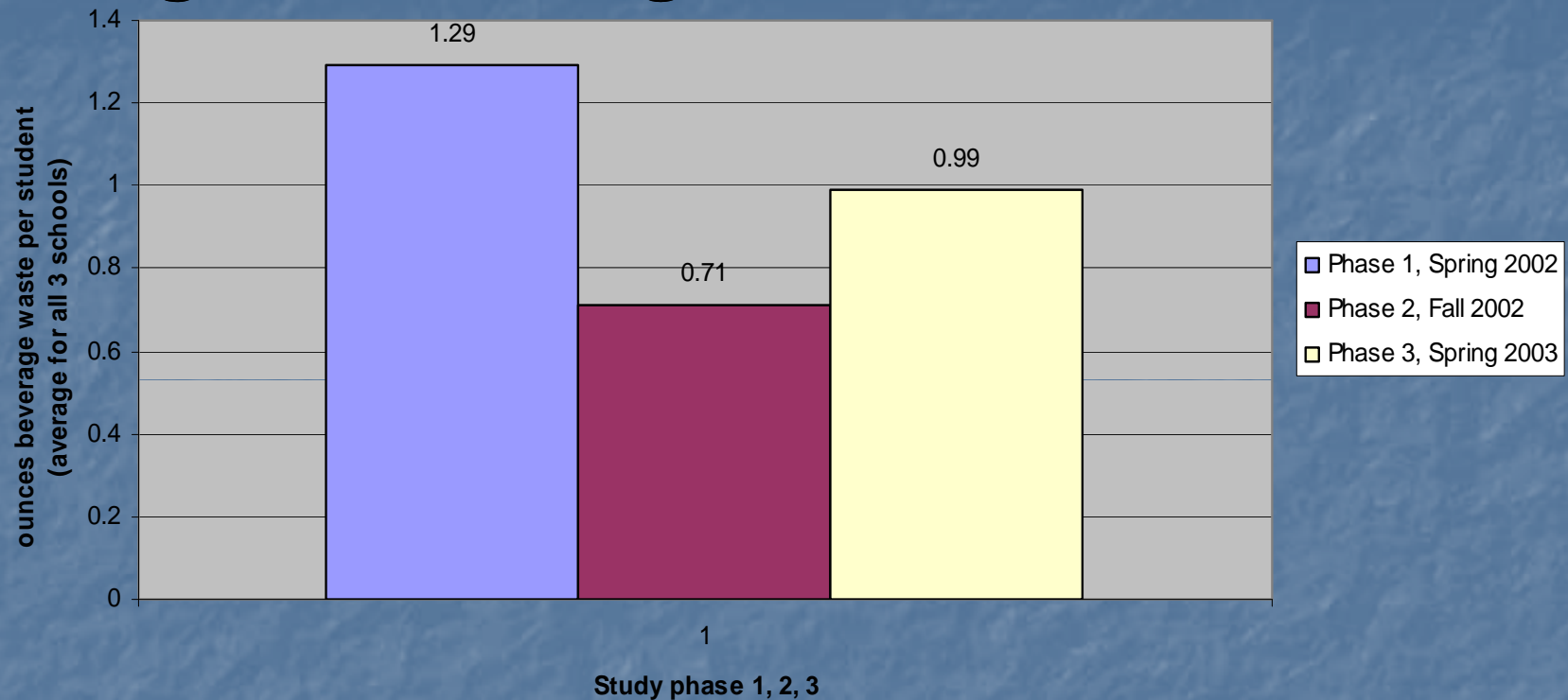


Implications: This study demonstrates the decrease in food waste per student as a result of implementing a Recess Before Lunch policy.

Source: Montana Office of Public Instruction School Nutrition Programs Recess Before Lunch Pilot Study, data from 3 Montana schools, April 2002-May 2003.



# Average Beverage Waste Per Student



Implications: This study demonstrates the decrease in beverage waste per student as a result of implementing a Recess Before Lunch policy.

Source: Montana Office of Public Instruction School Nutrition Programs Recess Before Lunch Pilot Study, data from 3 Montana schools, April 2002-May 2003.

## Results... Student Focus Groups and Staff Surveys/Comments

- Students accepted the change
- Improvements in cafeteria atmosphere
- Dramatic improvement in discipline problems on the playground and classroom.
- Children returning to classroom more settled, calmer and ready to learn.
- Gain in teaching time reported by teachers in morning and afternoon.

# Results... Challenges

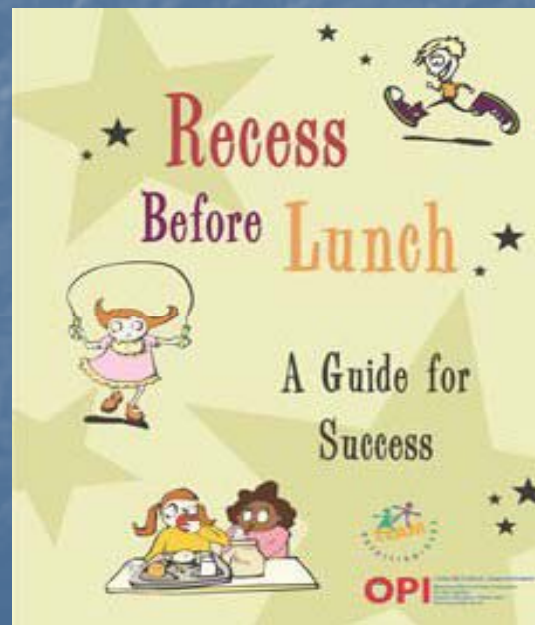
- Scheduling
- Staff buy-in and involvement
- Hand washing
- Meal payment plan
- Handling winter clothing and cold lunch storage



# Important Resource...

Recess Before Lunch: A Guide for Success

<http://www.opi.mt.gov/schoolfood/recessBL.html>



## Phase 2 of our research.....

# 2008 Survey of Principals

### Purpose:

- To gain information to further provide technical assistance to MT schools on RBL
- To evaluate the long-term outcomes of RBL
- To collect data on the rates of RBL and implementation factors in MT schools
- To reconfirm the benefits of RBL as a school wellness strategy with schools in MT and the nation

### Design:

- Statewide on-line survey of principals in K-8 public and private schools in Montana

# Project Design...Survey

## Development of Survey:

- An initial draft of the survey was developed and was field tested with five Montana principals.
- A final version was developed based on feedback from pilot survey phase
- The survey form contained both closed-option items and open-ended questions.
- Distribution: In January 2008, OPI sent out a message



# Project Design...Survey

## Survey Design and Questions:

- Survey questions were organized in a branching structure for the three targeted groups of administrators which included the following:
  - Administrators currently using a RBL schedule
  - Administrators who used a RBL schedule in the past but not currently using it.
  - Administrators that have never used a RBL schedule
- Other questions included: school enrollment size and grade levels served; length of time utilizing RBL, grade levels involved in RBL, observed benefits, challenges and facilitative factors,.
- Open ended questions asked for feedback from stakeholders and any advice for other principals on RBL

# Project Design...Survey

## Distribution of Survey:

- In January 2008, OPI sent out a message to school K-8 school principals with a link to the survey. One reminder email was sent out within the three-week distribution period.
- A door prize of a \$100 mini grant was offered as an incentive to principals to respond to the survey.

# Project Design...Results

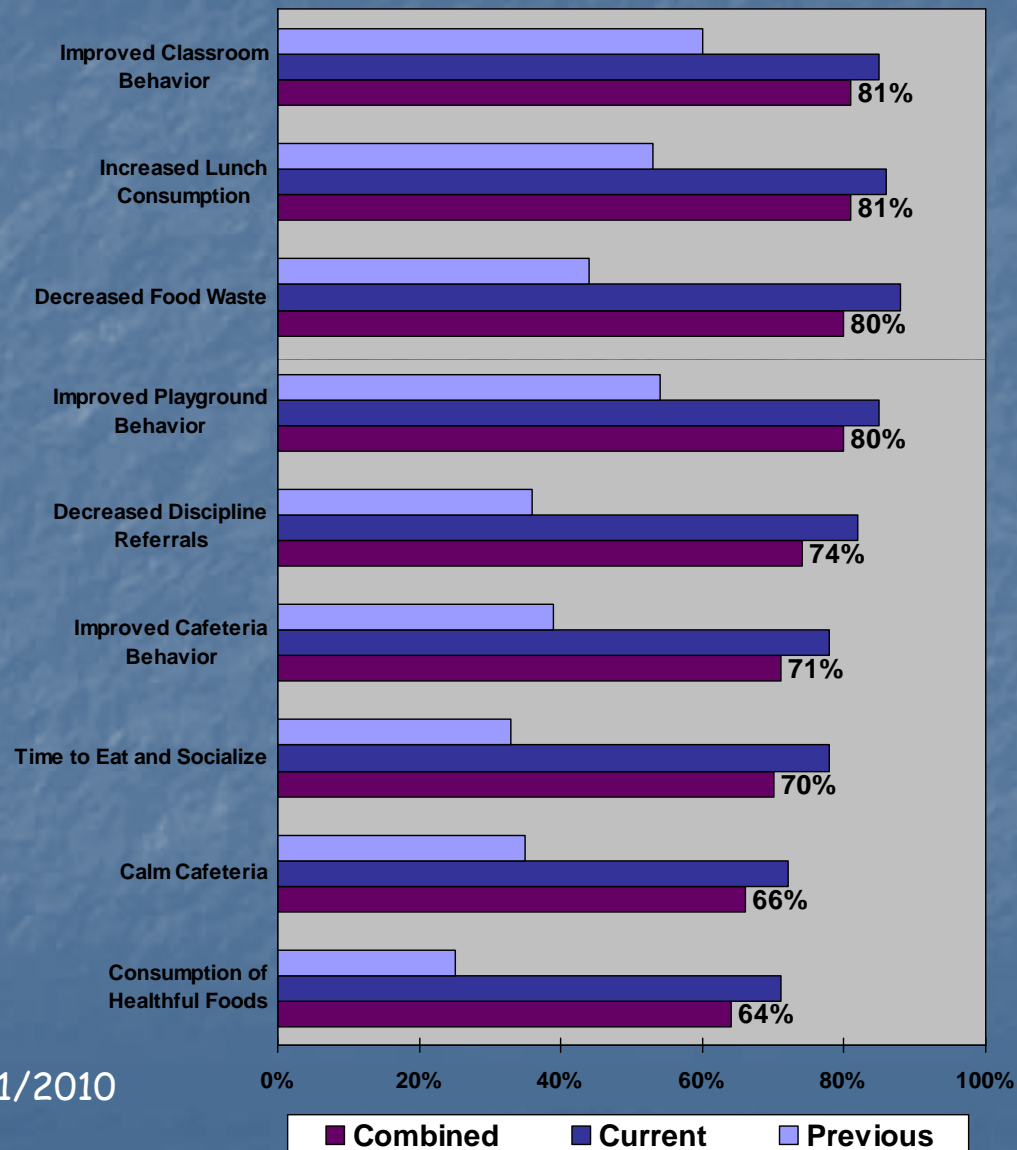
## Data Collection and Analysis:

- Response rate was 30% (195 out of 661)
- Responses were downloaded to Key Survey data-base and entered into SPSS (Version 16) for analysis
- Item response frequencies were calculated two ways, both including and excluding “Not Sure” values. The tables on the following slides exclude the Not Sure values.
- Each response was coded by the targeted group; combined responses are current and previous users.

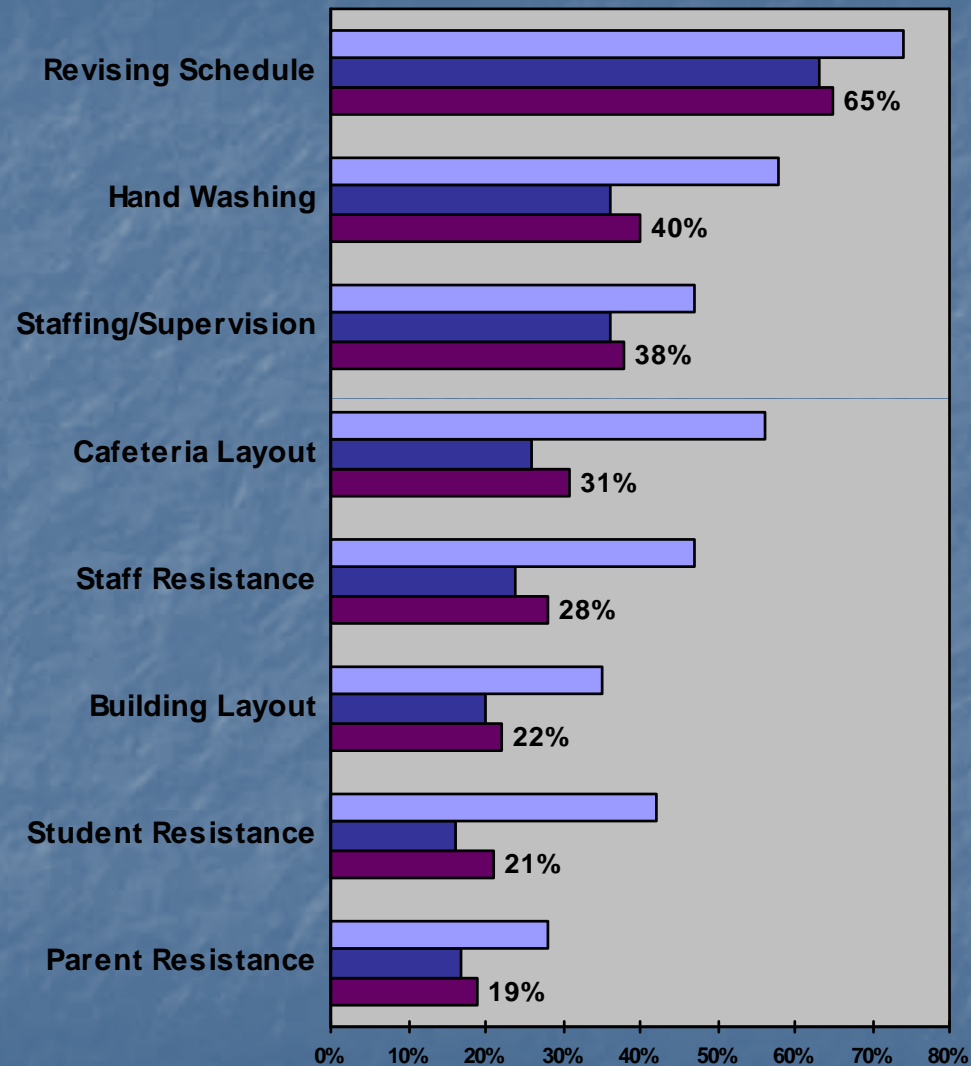
Responses were categorized according to common themes



# *Benefits Reported by Principals*



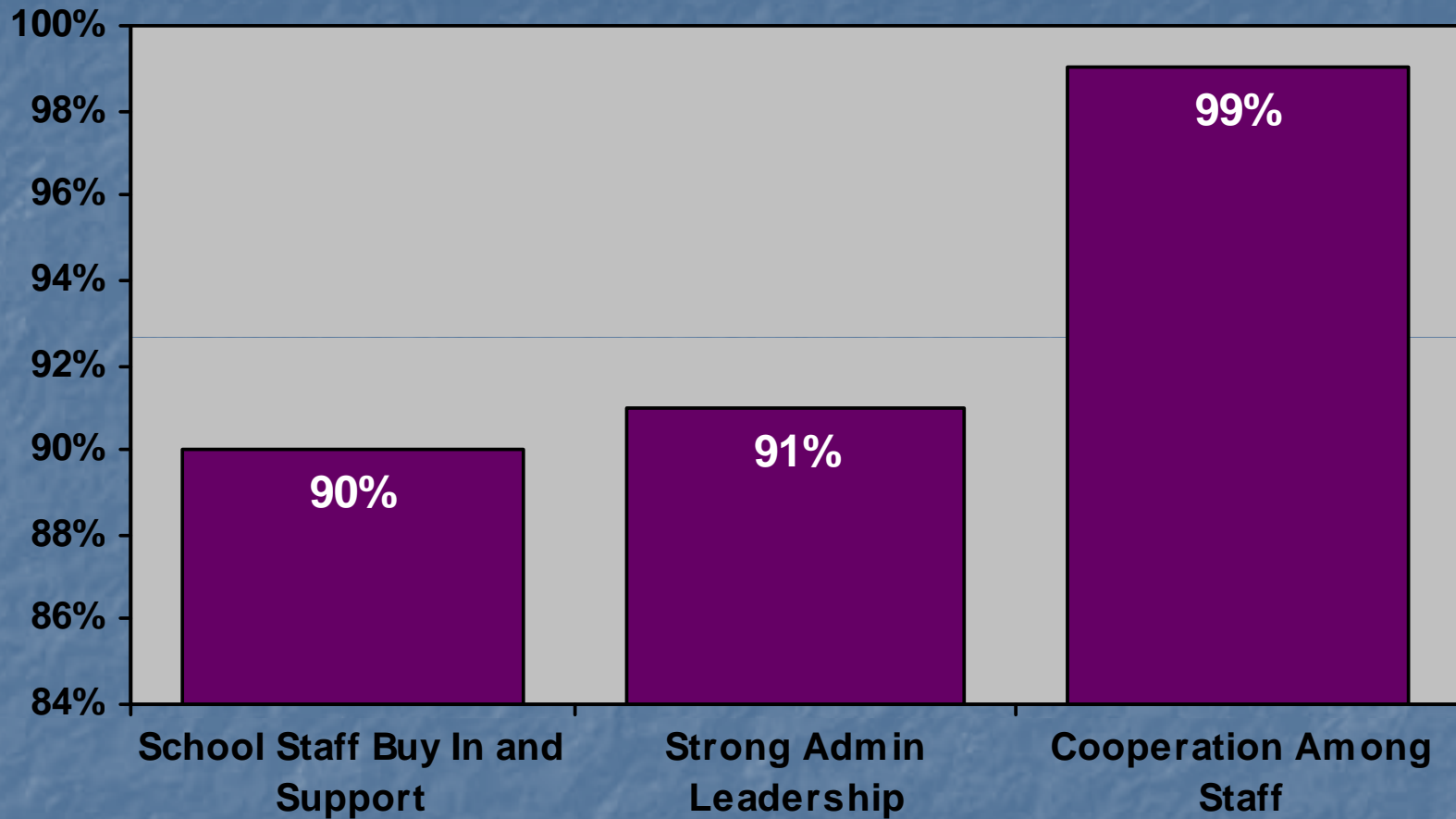
# *Challenges Reported by Principals*



3/11/2010

■ Combined ■ Current

# ***Results - Facilitated Factors for Success***



Note: Percentages reflect respondents who expressed a definite opinion (exclude *Not Sure* responses).



# ***Suggestions for Successful RBL Implementation***

- **Plan ahead**; obtain buy in and support from school staff.
- **Involve students**, parents, and school staff in planning efforts.
- **Start with a limited pilot program or trial period** – monitor and adjust as needed.

Be prepared to **address challenges** before implementing RBL.

- Have a plan to address:
  1. hand washing
  2. scheduling of lunch times and eating spaces
  3. supervision issues
  4. cafeteria, playground and hallway flow patterns

# The Benefits to a RBL Schedule are Worth Overcoming the Challenges



*Enhances nutrition, learning and behavior*

Important Resource...

## 2008 Survey Final Report

Challenges, Benefits and Essential  
Factors for Success in Implementing  
a Recess Before Lunch Schedule in  
Montana Elementary Schools

<http://www.opi.mt.gov/schoolfood/recessBL.html>



# Recess Before Lunch: Right for So Many Reasons

*“If you eat lunch before recess, I  
get a tummy ache” ... MT student*



*“Children are settled down and  
ready to learn when they return  
to the classroom” ... MT teacher*

*We are seeing less food waste,  
better behavior on the playground  
and in afternoon classes” ... MT  
principal*

# Areas of Future Efforts & Research

## Training and Technical Assistance:

- Publish research in peer reviewed journal and articles in school publications
- Development of RBL mentor network
- Develop additional hand washing and scheduling tools to guide

## Research:

- Relationship between amount of time students have to eat and the scheduling of recess before or after lunch
- The impact of a recess before lunch schedule on the amount of physical activity minutes per day

# Big Picture Message

- School Meals Serve Education Each Day

Children must be well nourished to be ready to learn and behave well during the school day.

- Impact on Human Well Being

How school meals are designed will affect not only student food consumption levels but impact the development of healthy eating habits and a student's relationship with food.



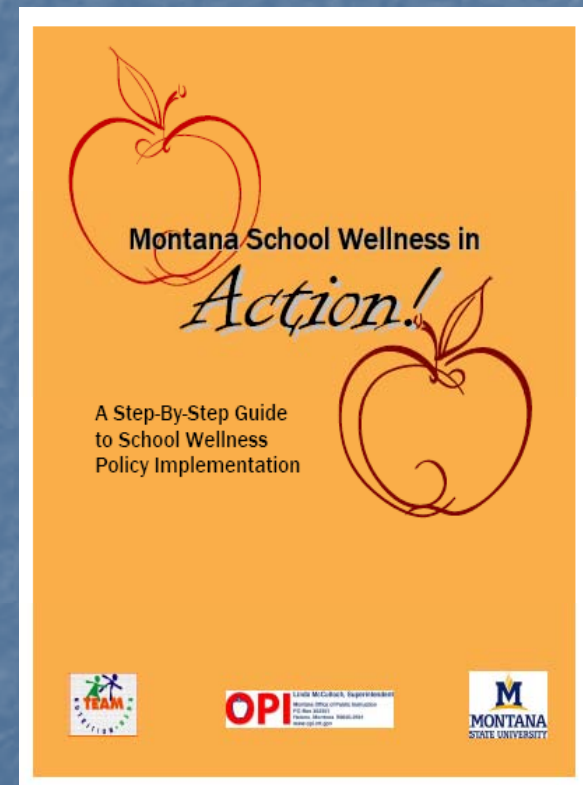
# Recess Before Lunch links to Enriching Human Well Being

- Improves consumption of healthy foods
- Allows for better social interaction and relaxed eating environment
- Is a cost neutral step and may decrease food costs
- Supports development of healthy eating habits



# Recess Before Lunch is a School Wellness Policy Strategy

- Increased awareness and commitment to nutrition and student wellbeing



<http://www.opi.mt.gov/schoolfood/wellness.html>

# Questions?

Katie Bark

(406)994-5641

[kbark@mt.gov](mailto:kbark@mt.gov)

Molly Stenberg

(406) 994-7217

[stenberg@montana.edu](mailto:stenberg@montana.edu)

Shelly Sutherland, Ed.D

MT NAPA –Program

Evaluator

<http://www.opi.mt.gov/schoolfood/recessBL.html>